U.S. Dep't. of Commerce / NMAO / NOAA / Aircraft Operations Center

FLT ID: 20130616H1	From: KMQY	To: KMQY
FLT #:	Blk In: 2154 Z	Lnd Time: 2147 Z
ETD: Z	Blk Out: 1509 Z	T/O Time: 1516 Z
ETE:	Total Blk: 6.8	Total Flt: 6.5
Sponsoring Org: OAR	Program: SENEX	Purpose: ATL NIGHT

AOC Flight Crew

Aircraft Commander: KIBBEY	Data System: BOSKO
Co-Pilot: MARTIN / KERNS	Avaps: CARPENTER
Navigator: SLOAN /	System Engineer:
Flight Eng: DARBY /	AA:
Flt Director: SEARS /	AA:
Avionics:	Crew Chief:

Participating Scientists, Visitors, & Add'l Aircrew on back. # of people listed on back:

	A/C - Takeoff	Wx Station - Takeoff	A/C - Land	Wx Station - Land
Pressure				

ATIS - Takeoff	
ATIS - Land	

Data Source	Number	Data Disposition / Date / Quality
Flight Level Tapes		
Radar Tapes		
Dropsondes		Good: Bad: Sent:
AXBT		

List other data sources on back in Remarks section.

Remarks (Storm Name, Mission ID, Recco Times, Fix Times)

Recco Times: Fix # Fix Time

Storm Name: _____

Mission ID: _____

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FLT ID:	T/O Time: Z	Lnd Time: Z
Name (Last, First)	Activity on Aircraft	Affiliation
DE GROOW, JOOST	PI	
POLLACK, ILANA	SCI	
BROCK CHARLES	SCI	
LIAO, JIN	SCI	
GRAUS, MARTIN	SCI	

Remarks:

N42RF ERROR SUMMARY
SENEX 2013 KMQY
16 June 2013

Flight ID: 20130616H1

Sensor or system	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2X
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2X
Vertical Accelerometer	AccZI.1
Altimeter	AltIGPS.1
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/MET/2013/20130616H1

Local Met Data:	Takeoff (1516Z)	Landing (2147Z)
Aircraft Static Pressure	1000.9mb	998.0mb
Tower Pressure (corrected)	999.2mb	996.3mb

Notes:

Total Measured Dewpoint #2, the primary dewpoint sensor, recorded erroneous data during different periods throughout the flight. TDM.1 was used to directly substitute values for TDM.2 during the following times:
15:21:35Z – 15:46:10Z
16:28:08Z – 16:32:05Z
18:25:58Z – 18:35:42Z
19:13:08Z – 19:15:18Z
20:34:58Z – 20:38:17Z
21:19:40Z – 21:47:30Z
At 19408Z, there was a spike in Measured Dynamic Pressure from the fuselage (PQM.2).
PQM.2 was modified by substituting values from PQM.1 with the equation:
TDM.3 was unavailable for this flight.

After the aircraft returned to MacDill AFB, a few instruments that were installed on N42RF were removed and calibrated in the AOC calibration laboratory. The final Quality Control data sets use the post project calibration coefficients for determining the output of the instruments.
The following parameters that have been updated from the original data set follow.
PDALPHA.2 - Radome Attack Differential Pressure Measured
PDBETA.2 - Radome Sideslip Differential Pressure Measured
PDALPHA.1 - Fuselage Attack Differential Pressure Measured
PQALPHA.1 - Fuselage Attack Dynamic Pressure Measured
PDBETA.1 - Fuselage Sideslip Differential Pressure Measured
PQBETA.1 - Fuselage Attack Dynamic Pressure Measured
PQM.3 - Measured Fuselage Dynamic Pressure, Two Sources --co-pilot
PQM.4 - Radome Dynamic Pressure Measured
TTM.1 - Measured Total Temperature Degree
TTM.2 - Measured Total Temperature Degree
Any derived value using the outputs from the measured parameters listed above have changed slightly from the values measured in real-time.
See SENEX_READ_ME.txt for file information.

Flight Director: *Ian Sears*
Phone #: *(813) 828-3310 ext. 3039*

GA_Atlanta_PP_SWtoNE

est_time	altit_ft	Comments	lat_deg	lat_min	lng_deg	lng_min	lat	lng	point	AGL_MSL
0:00:00	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	MSL
0:10:00	10000	enroute up								MSL
0:30:34	10000	enroute down								MSL
0:38:34	2000		34	6.87	-85	13.88	34.1145	-85.231	1	AGL
1:13:52	2000		32	42.78	-83	32.88	32.713	-83.548	2	AGL
1:18:42	8000	enroute up above PBL	32	54.25	-83	19.1	32.9041	-83.318	3	AGL
1:24:42	2000	spiral down	32	54.25	-83	19.1	32.9041	-83.318	3	AGL
1:59:57	2000		34	18.34	-85	0.1	34.3056	-85.002	4	AGL
2:02:21	2000		34	24.07	-84	53.22	34.4011	-84.887	5	AGL
2:37:36	2000		32	59.98	-83	12.22	32.9997	-83.204	6	AGL
2:40:00	2000	note max plume location	33	5.71	-83	5.33	33.0952	-83.089	7	AGL
3:15:14	2000	note max plume location	34	29.8	-84	46.33	34.4967	-84.772	8	AGL
3:17:37	2000		34	35.53	-84	39.44	34.5923	-84.657	9	AGL
3:30:45	2000	find max plume loc					34.0693	-84.029	99	AGL
3:36:45	8000	spiral up above PBL at max plume					34.0693	-84.029	99	AGL
3:49:53	8000	return to Pt 9	34	35.53	-84	39.44	34.5923	-84.657	9	AGL
3:55:53	2000	spiral down at Pt 9	34	35.53	-84	39.44	34.5923	-84.657	9	AGL
4:31:05	2000		33	11.45	-82	58.45	33.1908	-82.974	10	AGL
4:37:05	8000	spiral up out of PBL	33	11.45	-82	58.45	33.1908	-82.974	10	AGL
4:43:05	2000		33	11.45	-82	58.45	33.1908	-82.974	10	AGL
4:46:18	2000		33	19.09	-82	49.26	33.3182	-82.821	11	AGL
5:21:29	2000		34	43.18	-84	30.26	34.7197	-84.504	12	AGL
5:24:40	2000		34	50.82	-84	21.08	34.8471	-84.351	13	AGL
5:59:49	2000		33	26.74	-82	40.08	33.4456	-82.668	14	AGL
6:03:01	8000	enroute above PBL	33	34.38	-82	30.9	33.573	-82.515	15	AGL
6:09:01	2000	spiral down	33	34.38	-82	30.9	33.573	-82.515	15	AGL
6:44:08	2000		34	58.47	-84	11.9	34.9745	-84.198	16	AGL
6:59:08	15000	enroute up								MSL
7:07:28	15000	enroute down								MSL
7:22:28	543	KMQY Smyrna	36	0.54	-86	31.2	36.009	-86.52	0	MSL